Profiles of resistance of *Staphylococci* isolated from cases of subclinical mastitis in sheep in different stages of lactation and between two lactations

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INTRODUCTION

The subclinical mastitis cause negative impact on the meat sheep herds, providing lower weight gain of lambs from sick ewes. The aim of this study was to identify *staphylococci* profiles of antibiotic resistance from cases of subclinical mastitis in sheep in different stages of lactation and for two periods of lactations.

METHODS

✓ Herd: The milk samples were obtained from experimental herd located at Embrapa Southeast Livestock in São Carlos, State of São Paulo. The herd studied consisted of 160 Santa Inês sheep breed (Figure 1).

✓ Milk samples:
- First lactation ☞ At the beginning (14 days postpartum) and at the end of lactation (up to three days post weaning) from April to December 2009. Second lactation ☞ the milk samples were collected at 14 and 52 days postpartum and at the end of lactation (up to three days post weaning) from May to November 2010 (Figure 2) (HARIHARAN et al., 2004).

✓ Microbiology: The microorganisms were identified, according to HOLT et al. (1994).

✓ Susceptibility tests: Diffusion technique was used, with disks containing gentamicin (10µg), penicillin (10IU), oxacillin (1µg), tetracycline (30µg), eritromicin (15µg), sulpha+trimethoprim (25µg), vancomycin (30µg), clindamycin (2µg), rifampicin (30µg), chloramphenicol (10µg), cefepime (30µg) e ciprofloxacin (5µg), in accordance with the National Committee for Clinical Laboratory Standards (NCCLS, 2005).

Figure 1 – Santa Inês Breed

Figure 2 - Sampling of milk

RESULTS

The results are shown in the following figures.

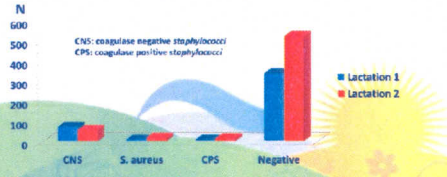

Figure 3. Microorganisms isolated from cases of mastitis in sheep.

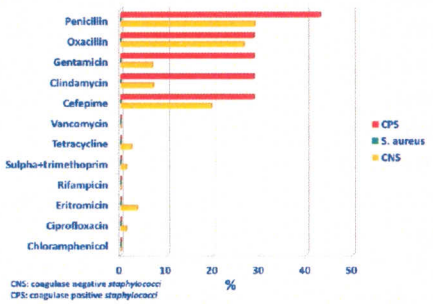

Figure 4. *Staphylococci* resistance profiles in the first lactation.

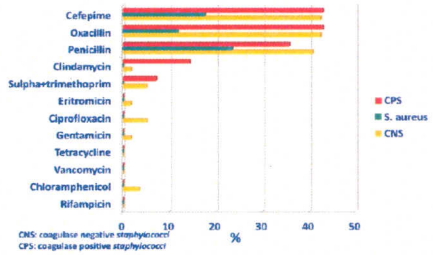

Figure 5. *Staphylococci* resistance profiles in the second lactation.

POTENCIAL IMPACTS ON SOLVING ANIMAL HEALTH ISSUES

Preventive measures to control mastitis deserves attention of technicians and producers. The study is relevant for the disease control in similar herds with the adoption of appropriate prophylaxis and treatment schemes, in order to avoid damages caused by the disease.

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Embrapa

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